Appl. No. 10/789,846

Amdt. Dated: Apr.21, 2006

Response to Office Action Dated Mar. 24, 2006

Remarks/Arguments:

This communication is in response to an Office Action dated March 24, 2006. Claims 1-17 are pending and stand rejected at present. Claim 9 is canceled. Claims 1-8 and 10-17 are amended herein to place the application in condition for allowance. As such, applicants respectfully request reconsideration of this application. The following remarks are in support of the claims as submitted herewith, and in response to the Office Action dated November 10, 2005.

Claims 1-17 were withdrawn from consideration as being directed to a nonelected invention. Claims 1-8 and 10-17 are amended herein to direct the claims to compositions.

Claims 1-7 and 10-16 were rejected under 35 U. S. C. 102(b) as being anticipated by disclosures in Walley 4,572,295, Peccoux et al. 4,918,121, Peck 5,211,827, JP-59-089383, or Raychem Corporation WO 94/03743. Claim 1 is amended herein, and to the extent that the Examiner maintains the rejection, applicants respectfully traverse.

Walley discloses methods of selectively reducing the water permeability of a subterranean formation (claim 1) by introducing the treatment agent into the formation through a shaft or well, and allowing the treatment agent to seep into the formation (col. 4, line 64 – col. 5, line 2). Walley discloses that the fluid carrier may be thickened with a suitable thickener, if necessary, so that the treatment agent comprises a stable, pumpable slurry (col. 4, line 12 – 15). Thus, Walley discloses a thickener mixed with a hydrogel, byt does not disclose a seal forming base material mixed with a hydrogel. A thickener material to render a fluid pumpable is not the same as a seal forming base. Also, applicants believe Walley fails to teach a wellbore seal composition, but rather, teaches using a wellbore as a conduit to deliver treatment agent to a formation adjacent the wellbore. Since, Walley does not disclose all features and limitations of Applicant's claims, Applicants' invention is not anticipated.

Peccoux teaches an organopolysiloxane composition curable into elastomeric state in a confined atmosphere, comprising an organopolysiloxane, crosslinking agent, Appl. No. 10/789,846 Amdt. Dated: Apr.21, 2006 Response to Office Action Dated Mar. 24, 2006

inorganic fillers, and hydrogel, where the hydrogel comprises colloidal hydrogel and water (claim 1). Peccoux discloses the use of very small amounts of hydrogel so that there is no effect, or only a negligible effect, on the final properties of the silicone elastomer produced after crosslinking (col. 3, lines 27 – 29); thus, the hydrogel of Peccoux should not expand to any degree so that the properties of the composition is altered. Peccoux also discloses that the hydrogel have the advantage of providing an effective and easily applied mechanism for dispersing water homogeneously within the composition (col. 3, lines 30 – 34). Peccoux further discloses that the level of hydrogel is 8% by weight or less, preferably 2% or less (col. 3, lines 7 – 11). Such low levels of hydrogel would not yield an expandable mixture. Applicants believe Peccoux does not teach applicants expandable composition, and does not anticipate Applicants' invention as claimed.

Peck discloses an electrochemical cell comprising an anode, anolyte, cathode, catholyte, the catholyte having a different pH when compared to the anolyte, and a membrane which includes hydrogel dispersed in a matrix, but Peck fails to teach expandable sealing compositions. Therefore, Peck does not anticipate Applicants' invention as claimed.

JP-59-089383 teaches a packing material used for construction applications, comprising rubber, a liquid and water swellable polymer material, and a hydrogel, but fails to disclose that the hydrogel is the water swellable component which renders the composition expandable. Hence, JP-59-089383 does not anticipate Applicants' invention as claimed.

Raychem Corporation WO 94/03743 teaches sealing members which are pipe gaskets, or gaskets used as seals for CATV, telephone and power cable connectors, or closures for freebreathing aerial applications (page 8, lines 30 to 35). The members are elastomeric bodies (claim 1) with hydrogel and water swellable polymer physically placed inside the elastiomeric body. However, Raychem does not disclose that a hydrogel and base material are blended together to form the seal. As such, Raychem does not anticipate Applicant's invention.

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Claims 1-8 and 10-16 are rejected under 35 U. S. C. 103(a) as being unpatentable over Walley 4,572,295, Peccoux et al. 4,918,121, Peck 5,211,827, JP-59-089383, or Raychem Corporation WO 94/03743. Claim 1 is amended herein, and insofar that the Examiner maintains the rejection, applicants respectfully traverse.

In regards to Walley 4,572,295 Applicants' detailed reading of the references find no motivation suggested to modify any reference to achieve the invention as claimed. Contrarily, Walley teaches methods used only in a formation (col. 5, lines 6 to 32), while teaching away from use in wellbores (see col. 5, lines 33 to 37 where Walley teaches the use of the wellbore as a conduit for delivering the treatment to the formation, and that the wellbore should not be blocked by the treatment mixture). It is held that motivation may be lacking when the state of the art at the time of the invention in question was discovered pointed researchers in a different direction than the inventor proceeded. The Federal Circuit has repeatedly recognized that proceeding contrary to the accepted wisdom in the art represents "strong evidence of unobviousness." In re Hedges, 783 F.2d 1038, 1041, 228 U.S.P.Q. 685, 687 (Fed. Cir. 1986), for example. Hence, as Walley teaches away from use in a wellbore, motivation to modify the reference is even further lacking, and applicant's invention is non-obvious.

Peck teaches electrochemical cell designs. Applicant's invention relates to wellbore seal compositions using a water expanding hydrogel. There is no motivation in Peck to modify the reference to achieve a water expandable seal.

Peccoux teaches compositions which do not swell due to the presence of hydrogel, and in fact teaches away from an expandable product. As such, no motivation exists to modify Peccoux to achieve Applicant's invention feature and applicant's invention is non-obvious.

JP-59-089383 teaches a packing material used for construction applications, comprising rubber, a liquid and water swellable polymer material, and a hydrogel, but fails to teach or provide motivation to use a water swellable hydrogel.

Raychem Corporation WO 94/03743 teaches sealing members which are pipe gaskets, or gaskets used as seals for CATV, telephone and power cable connectors, or Response to Office Action Dated Mar. 24, 2006

closures for freebreathing aerial applications (page 8, lines 30 to 35). The members are elastomeric bodies (claim 1) with hydrogel and water swellable polymer physically placed inside the elastiomeric body. Raychem, however, provides no motivation to use water swellable hydrogel, nor any motivation to blend the hydrogel, water swellable polymer, and elastomer to form the seal. As such, Applicant's invention is non-obvious in view of Raychem.

Amendments to the independent claims have been made to place the application in condition for allowance. Amendments made to the independent claims are applicable to the claims dependent thereon. Applicants submit that this paper is fully responsive to the comments in the Office Action and respectfully solicit for this application to be granted in light of these amendments and remarks. If the Examiner believes that the prosecution of the application would be facilitated by a telephone interview, Applicants invite the Examiner to contact the undersigned at 281-285-8606. The Commissioner is authorized to charge any additional required fee, or credit any excess fee paid, to Deposit Account 04-1579 (56.0736).

Respectfully submitted,

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